



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,424	12/12/2001	John J. Hart III	ECD-0004	2326

7590 02/19/2004

MILLS & ONELLO LLP
Suite 605
Eleven Beacon Street
Boston, MA 02108

EXAMINER

DINH, TAN X

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 02/19/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,424

Applicant(s)

HART ET AL.

Examiner

TAN X. DINH

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Art Unit: 2653

1) The I.D.S filed 11/25/2002 and 4/01/2002 have been considered by the Examiner. However, the Japan and/or foreign document(s), if they have not been written in English, are considered to the extent that could be understood from the English Abstract and the drawings.

Form PTO-1449 is attached herein.

2) Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

The abstract is not direct to this particular invention. A new abstract is required in next communication.

3) The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested.

OPTICAL STORAGE MEDIUM HAVING A PLURALITY OF DISTORTING REGIONS.

4) The drawings are objected to because:

Art Unit: 2653

a) Figures 4-7 and 15 are separated into three different figures. They could be re-labeled as figure 4A, 4B, 4C, etc.,.

b) The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the forming multiple indentations of multiple depths in the first layer (claims 14 and 41) and forming multiple convex features of multiple thicknesses at the first layer (claims 21 and 48) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5) Claims 1-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "data stored in the first layer" (claim 1, lines 4-5; claim 29, lines 3-4) is unclear and cannot be understood. The data stores on data layer only, not on first layer as claimed.

The phrase "the reading layer" (claim 3, line 2; claim 31, line 2) lacks clear antecedent basis. No "reading layer" has been previously recited in claims 1 and 29 and therefore the limitation cannot be understood.

Art Unit: 2653

Claim(s) 2-28,30-55 incorporate the indefiniteness of claim(s) 1 and 29 by virtue of their dependency thereon.

6) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

7) (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8) (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9) Claims 1-3,5-10,23,24,27,29-31,33-38,50,51 and 54 as understood by the meaning of 112, 2nd above, are rejected under 35 U.S.C. 102(e) as being anticipated by LAWANDY et al (6,338,933).

a) LAWANDY et al discloses a method for modifying an optical path of an optical medium including a first layer (Figs.3A&3B, 26) adjacent to a data layer (Figs.3A&3B, 24, 28) as claimed in claim 1, comprising the step of:

Selecting region of first layer to be distorted (Fig.8, non-planar surface topography);

Distorting the region of first layer such that a reading operation of data stored is modified (column 9, lines 25-44).

Art Unit: 2653

b) The optical medium of claim 29 corresponding to the method of using same as claimed in claim 1. Therefore, claim 29 is rejected for the same reasons of anticipation (obviousness) as used above.

c) as to claims 2 and 30, LAWANDY et al shows the reading layer in figure 3A, layer 26.

d) as to claims 3,5,6,31,33 and 34, LAWANDY et al shows a back layer adjacent the data layer and opposite the reading layer in figure 3A, 24. It is noted that, 22 is data layer, see column 6, lines 29-57).

e) as to claims 7-9,35-37, LAWANDY et al shows for selecting a random/predetermined region on the first/reading layer for distorting (Fig.8, Non-Planar Surface topography region).

f) as to claims 10 and 38, LAWANDY et al shows the optical path of incident light in the distorted region is modified in column 9, lines 25-44.

g) as to claims 27 and 54, LAWANDY et al shows the distorting region is formed by pressure, heat, chemical, electrical, etc., in column 9, lines 30-44.

h) as to claims 23,24,50 and 51, LAWANDY et al shows the distorting region comprises an alteration of outer surface of first layer in figure 8, non-planar topography.

10) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2653

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12) Claims 4, 11-22, 25, 26, 28, 32, 39-49, 52, 53 and 55 as understood by the meaning of 112, 2nd above, are rejected under 35 U.S.C. 103(a) as being unpatentable over LAWANDY et al (6,338,933).

LAWANDY et al discloses all the subject matter claimed as in claims 4 and 32, except to specifically show that the distorting region is further performed on the back layer. It would have been obvious to distort a region on the back layer in LAWANDY et al's optical recording medium because: The distorting region in LAWANDY et al's optical recording medium as seen in figure 8 is based on changing surface topography, this change could be

Art Unit: 2653

performed either on front surface, back surface or both.

Therefore, someone with ordinary skill in the art at the time of the invention was made would use this teaching on any surface layers of the optical recording medium in order to distort the light beam during reproducing process.

As to claims 11-22,39-49, it would have been obvious to form the distorting regions by multiple indentations and/or convex feature in LAWANDY et al's optical recording medium since the distorting regions can be any different shapes or sizes, which capable of distorting the light beam.

Further, the technique of using a plurality of different layers for covering a whole or a portion of the recording medium are old and widely used in the art.

As to claims 25,26,52 and 53, LAWANDY et al shows the distorting region is conducted during or following the manufacture of the optical recording medium in column 9, lines 30-44.

As to claims 28 and 55, Official Notice is taken that dual-sided optical recording medium are widely used in the art for storing more information data, and therefore they are old and well known. It would have been obvious to use the old and well known dual-sided optical recording medium in LAWANDY et al's because, in the absence of any new or unexpected result, selecting of a known material/element based on its suitability for the intended use is deem obvious. In re LESHIN, 125 USPQ 416.

Art Unit: 2653

13) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see the prior arts list in form PTO-892 attached herein).

Applicant is reminded that in amending in response to a rejection of claims (if the rejection involves with any applicable arts), the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR §1.111(c).

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN X. DINH whose telephone number is (703) 308-4859. The examiner can normally be reached on Monday - Friday, 8:00AM - 5:30PM.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2653

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER

18 February 2004